

Real Solutions for Lygus Bug in
California Strawberries

Summary of Research Efforts

2021-2023

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Ventura UCCE Grower Meeting

September 13, 2024

Introduction

- Lygus bugs in strawberry.
- The necessity of a variation in tactics to obtain an optimum of control.

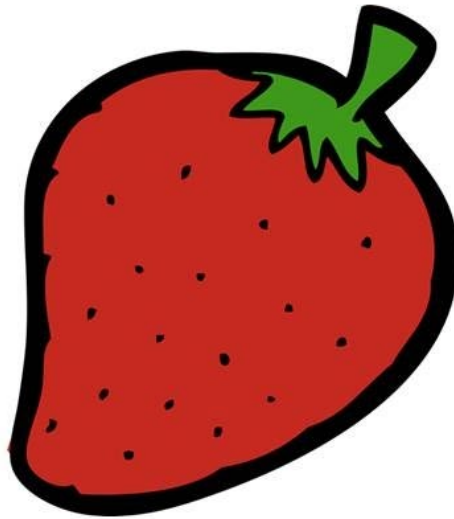




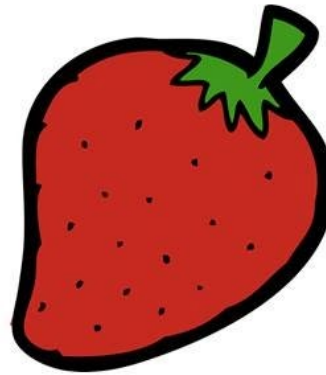


Important: Presence of lygus means smaller fruit.

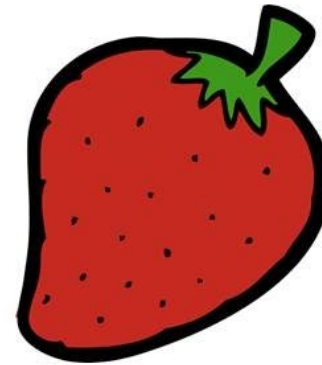
Fruit Size Comparison



Very few lygus
Avg fruit size 22.5 g



Many lygus – grower check
Avg fruit size 16.2 g



Many lygus – untreated check
Avg fruit size 15.8 g

Important: Presence of lygus means smaller fruit.



Evaluations of 2021 & 2022

- Second year Monterey
- Backpack applications



Applications

- 2021: 9 June, 21 June and 29 June
- 2022: 11 June, 19 June, and 25 June
- Early morning applications only

Test Materials2021

Water 150 gal/A

- Plinazolin (ISM555) at three rates
- Cormoran (acetamiprid + novaluron) at 12 fl oz
- Mustang Max (zeta-cypermethrin) at 4 fl oz
- Control

* All applications at $\frac{1}{4}$ fl oz per gallon Dyna-mic surfactant

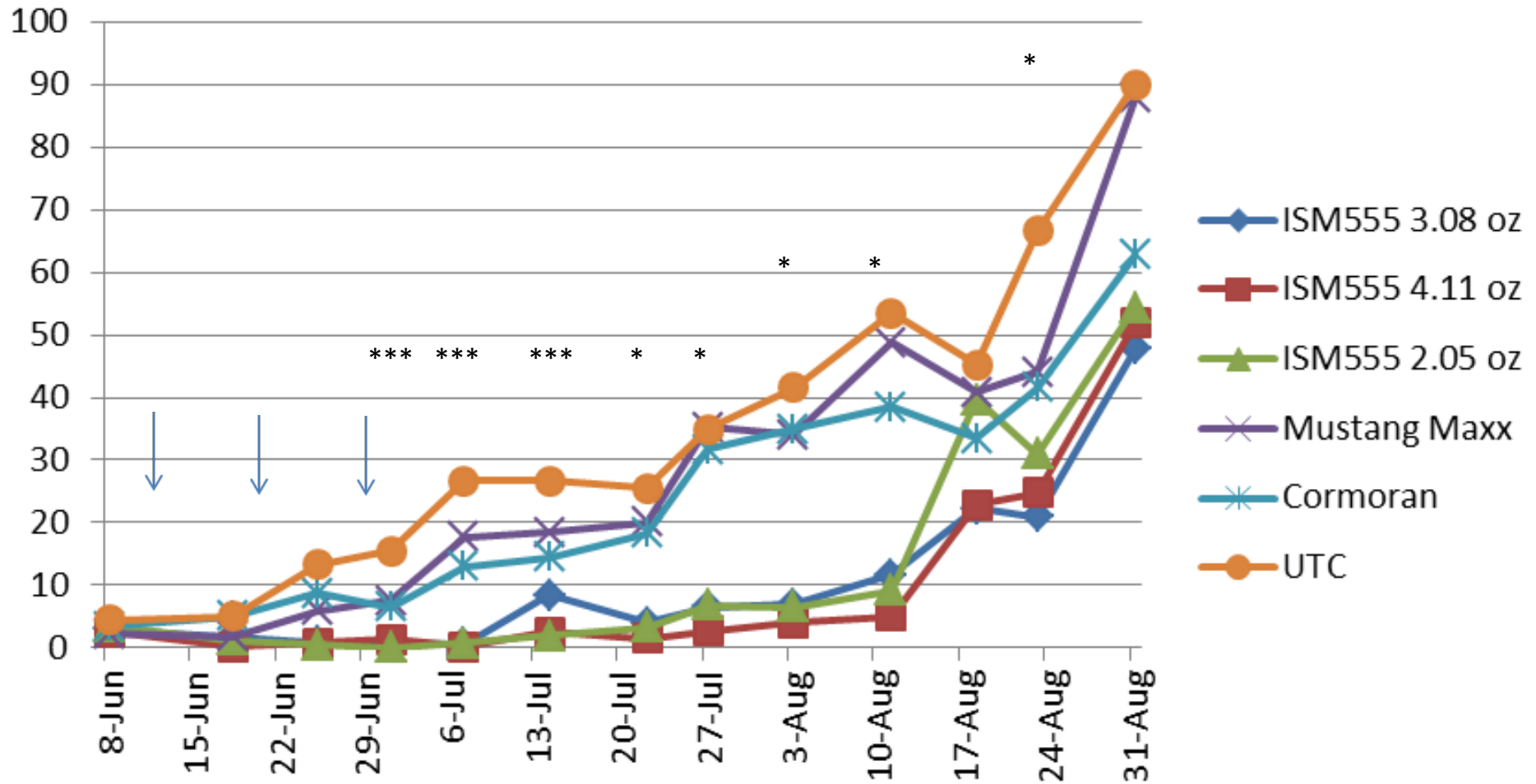
Test Materials 2022

Water 150 gal/A

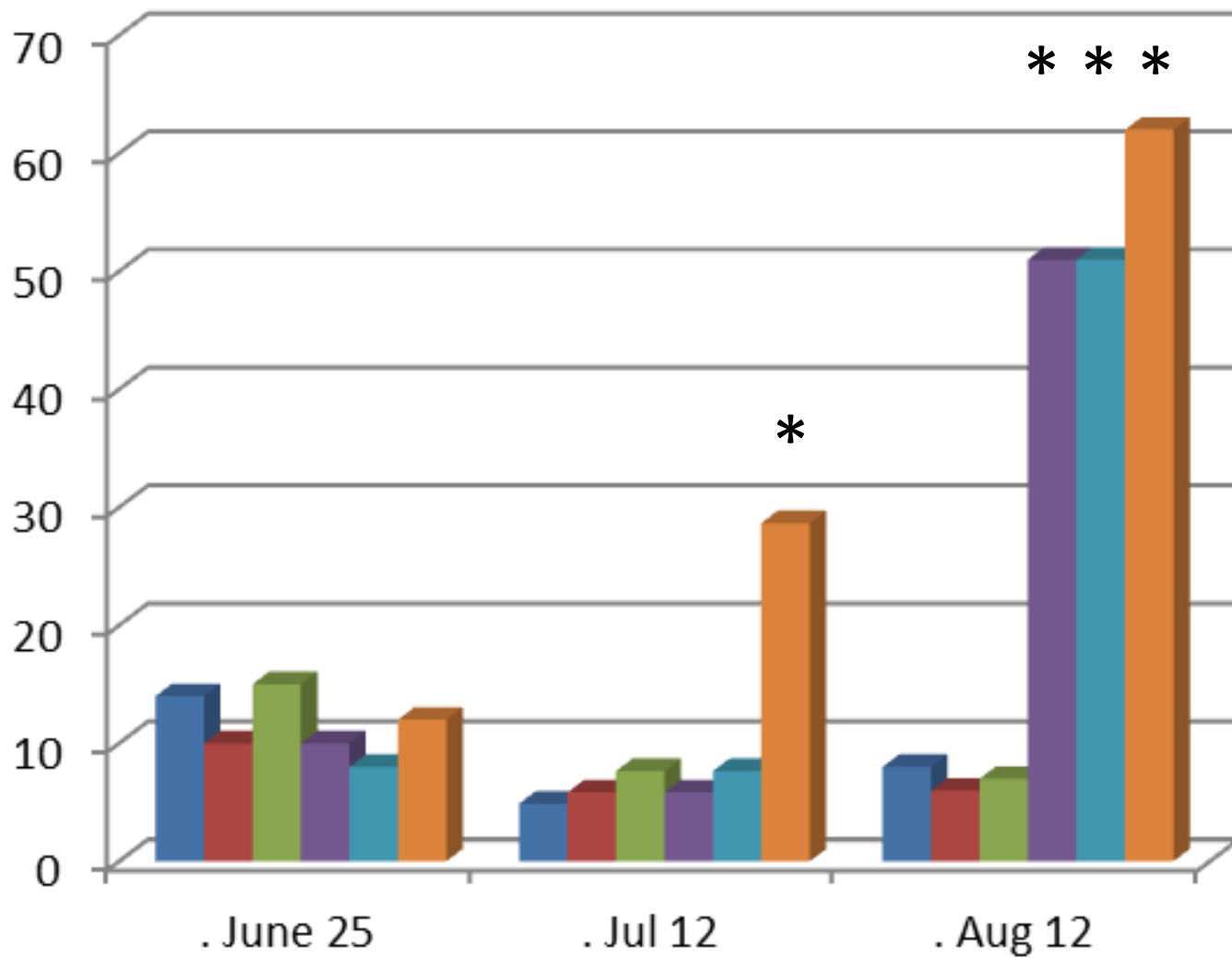
- Plinazolin (ISM555) at three rates
- Mustang Max (zeta-cypermethrin) at 4 fl oz
- Control

* All applications at $\frac{1}{4}$ fl oz per gallon Dyna-mic surfactant

Lygus2021

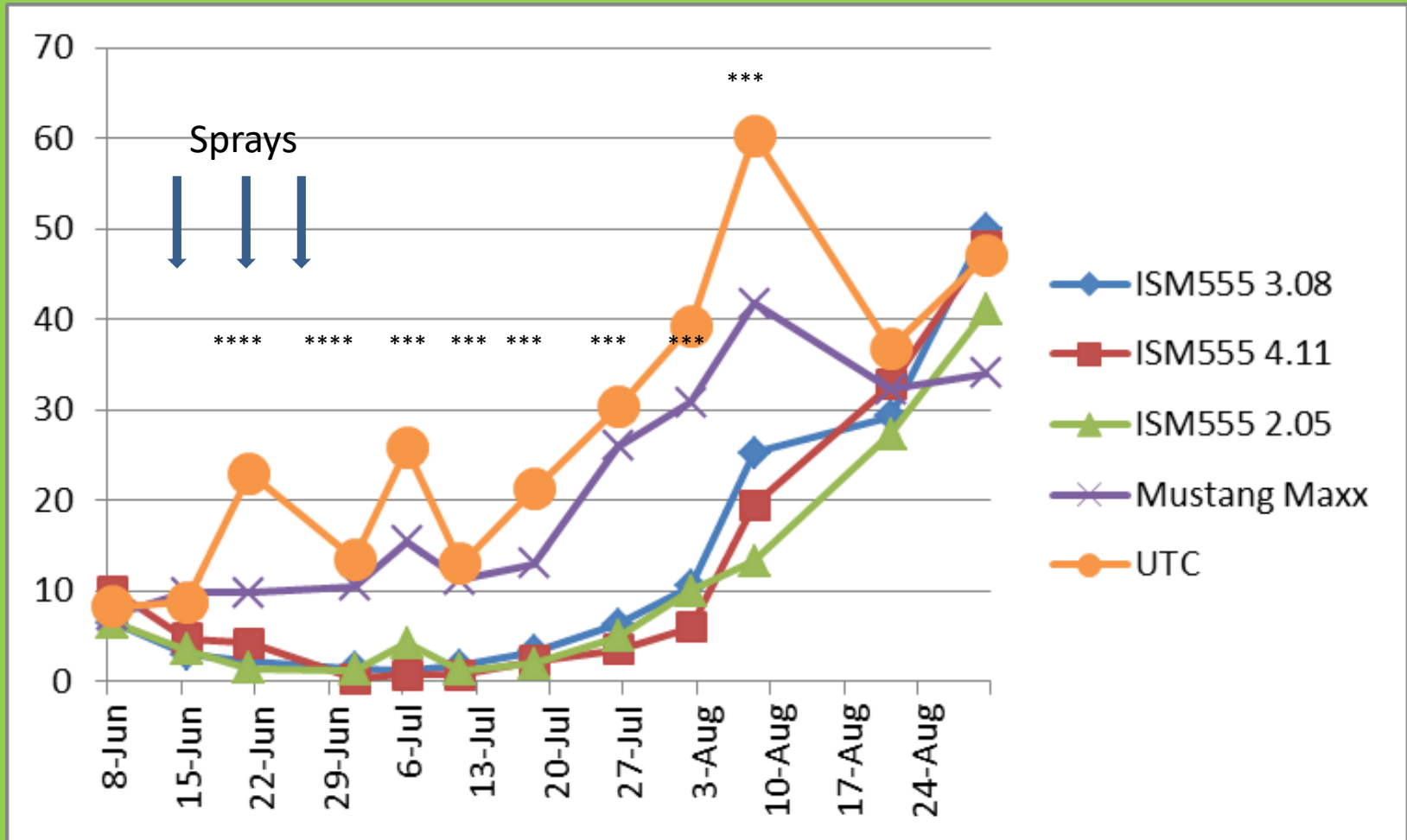


Cat facing 2021

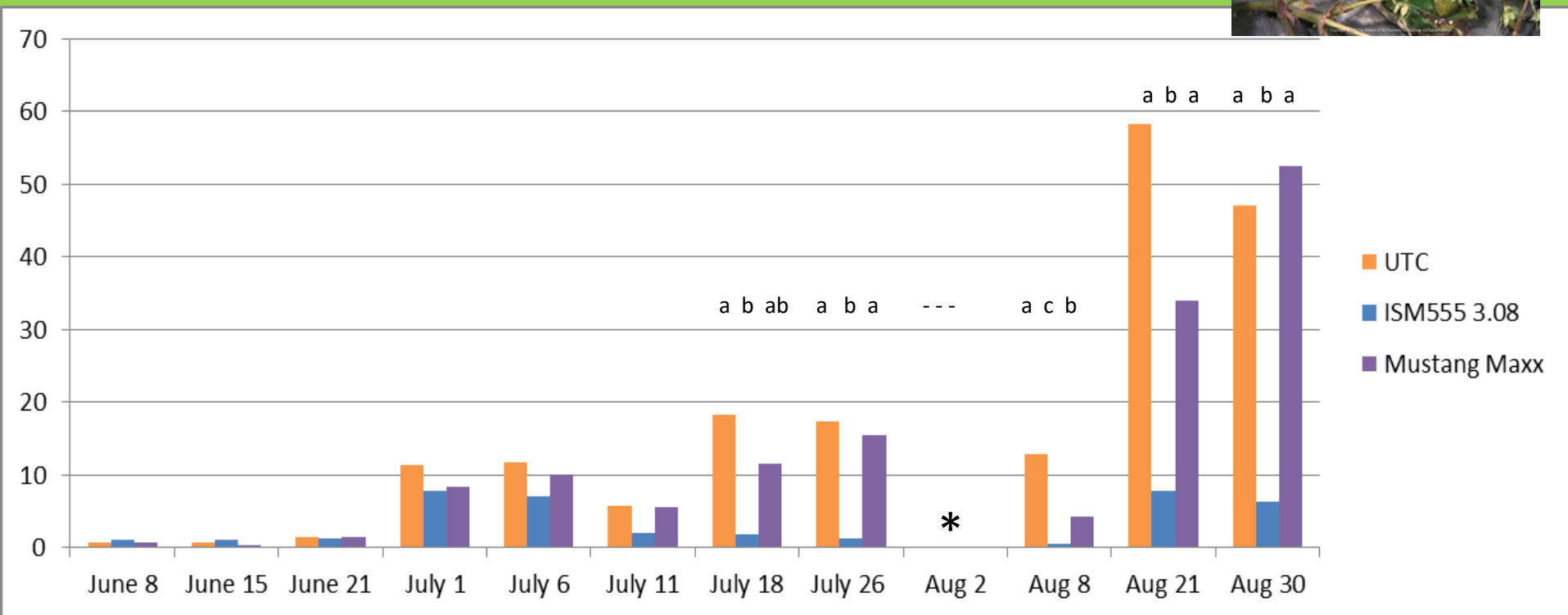


- ISM555 3.08 oz
- ISM555 4.11 oz
- ISM555 2.05 oz
- Mustang Maxx
- Cormoran
- UTC





2022 Total Lygus



Cat facing 2022



Test material list 2023

- Dates of application August 3, 10 and 17.
- 150 gallons water carrier per acre
- Plinazolin at 2.05 and 3.08 fl oz
- Sefina at 14 and 28 fl oz
- Beleaf  Avaunt Evo  Avaunt Evo
- Grower standard = Rimon  Malathion  Danitol + Actara
- Untreated check

Widespread Max 6 fl oz/100 gal surfactant

Evaluations

- Lygus + beneficials evaluated weekly
- Measurements of twisted fruit began a few weeks after last application.

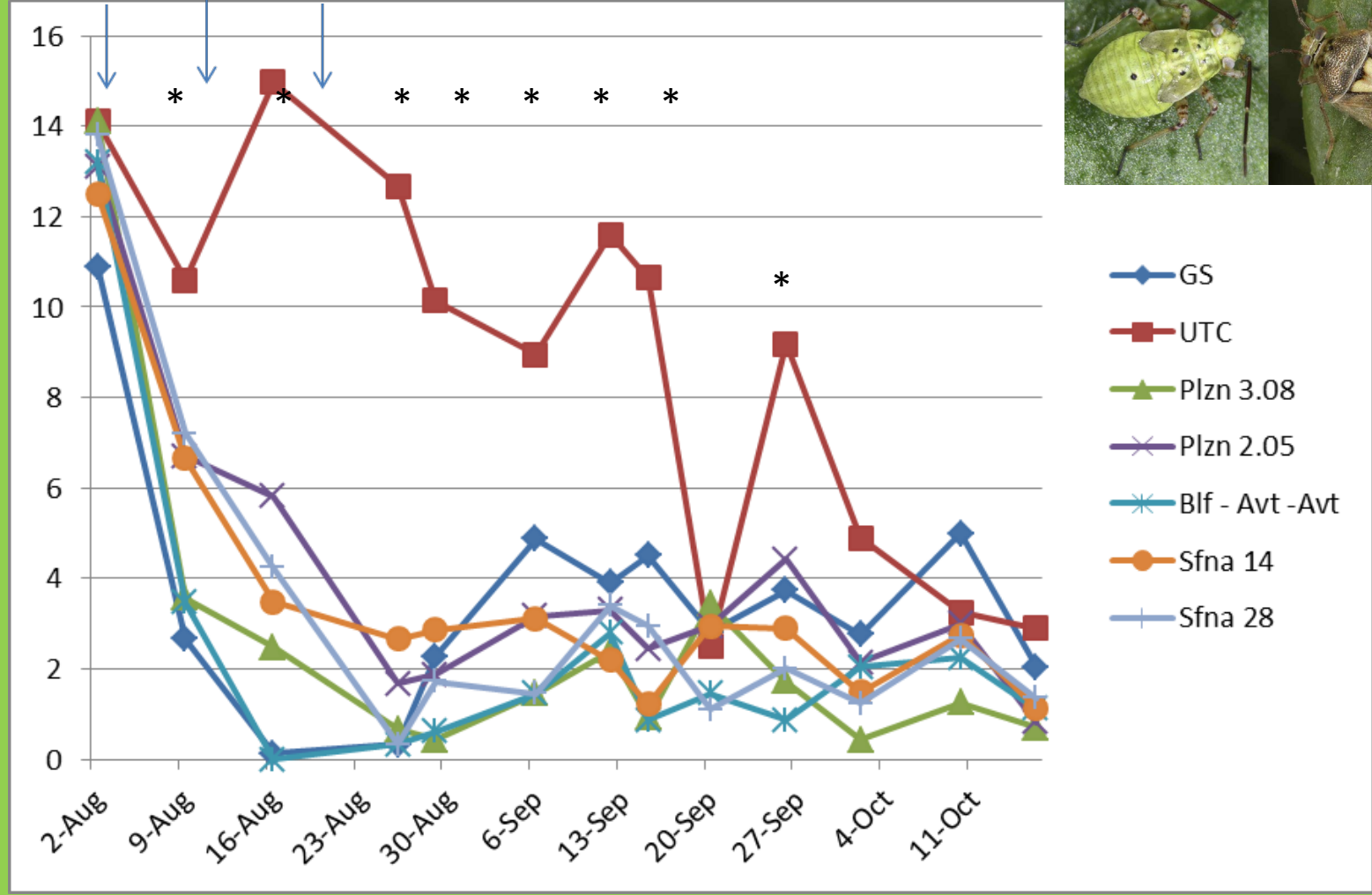


Tractor application of materials

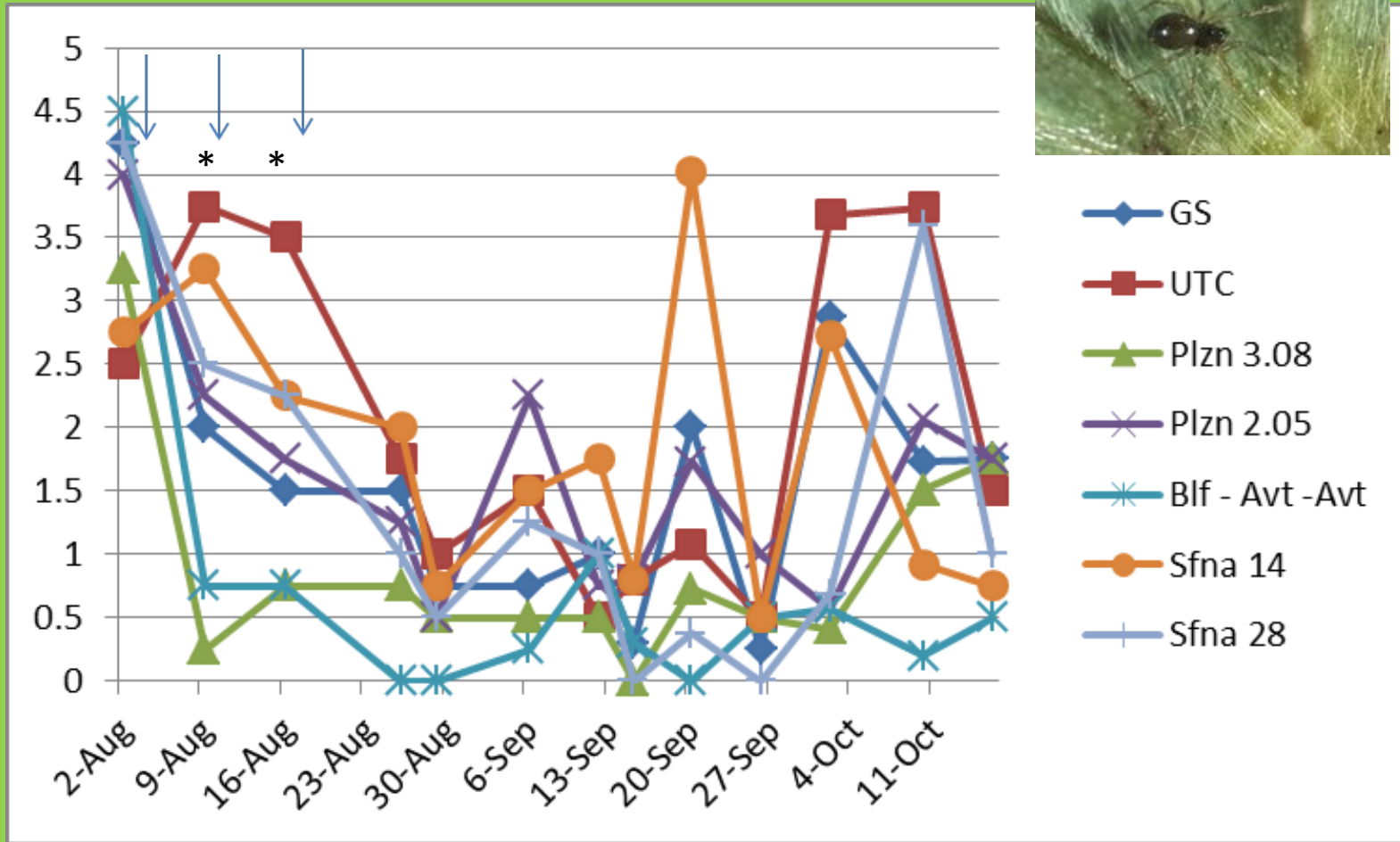
Tee Jet 80015 VK Boquillas 125 psi



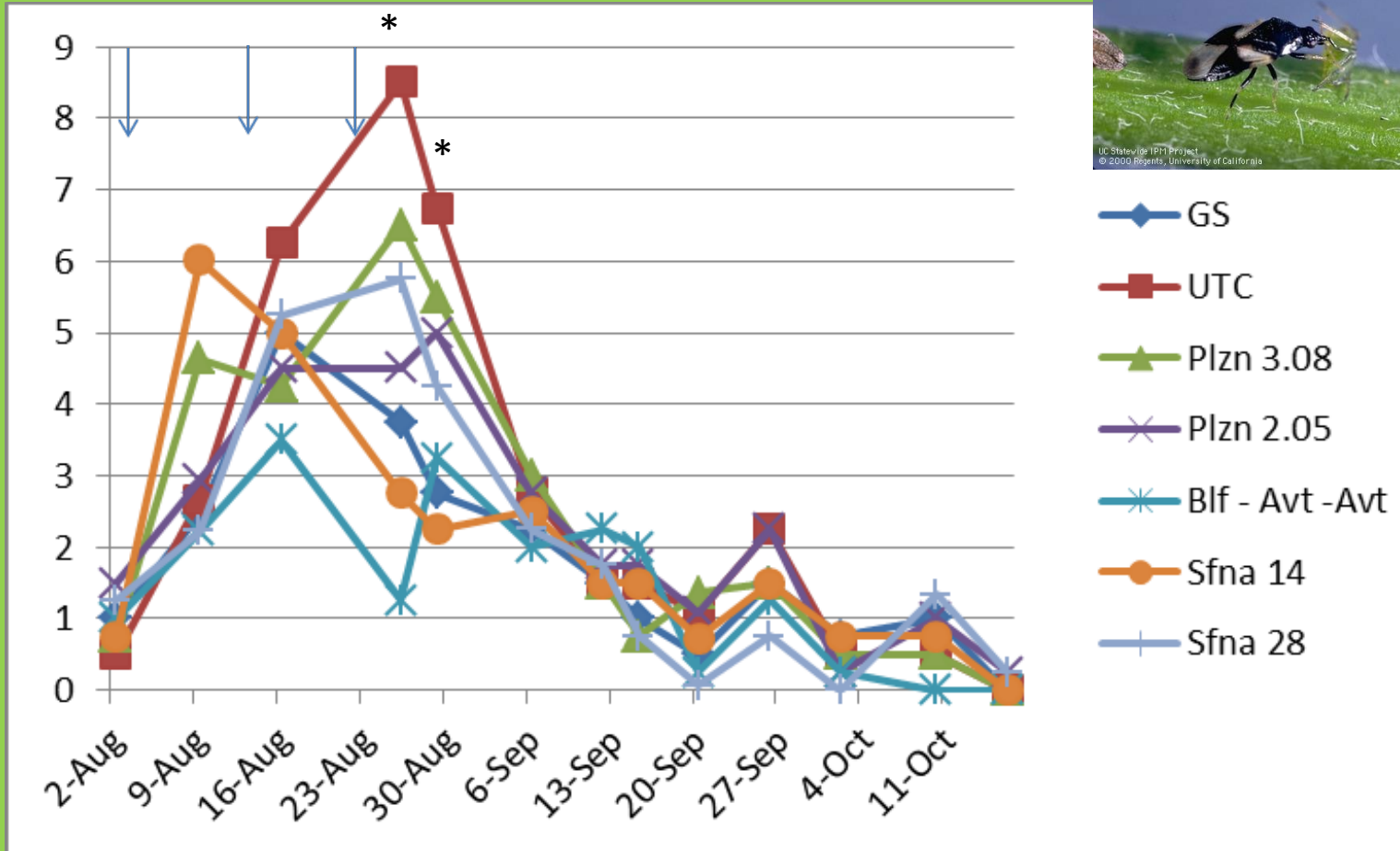
2023 Lygus



2023 Dwarf spiders



2023 Pirate Bugs

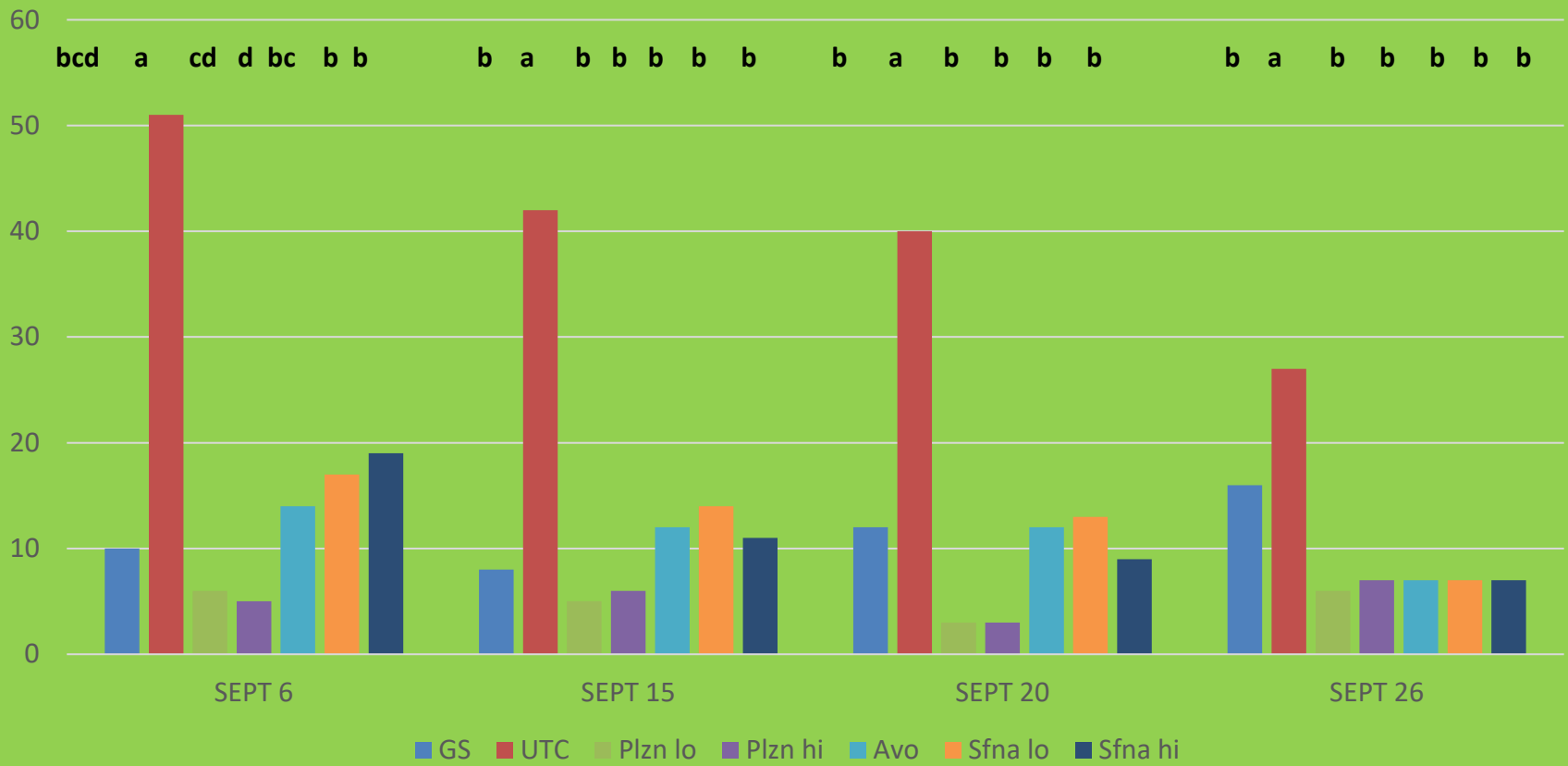


- ◆ GS
- UTC
- ▲ Plzn 3.08
- × Plzn 2.05
- * Blf - Avt - Avt
- Sfna 14
- + Sfna 28

Twisted fruit



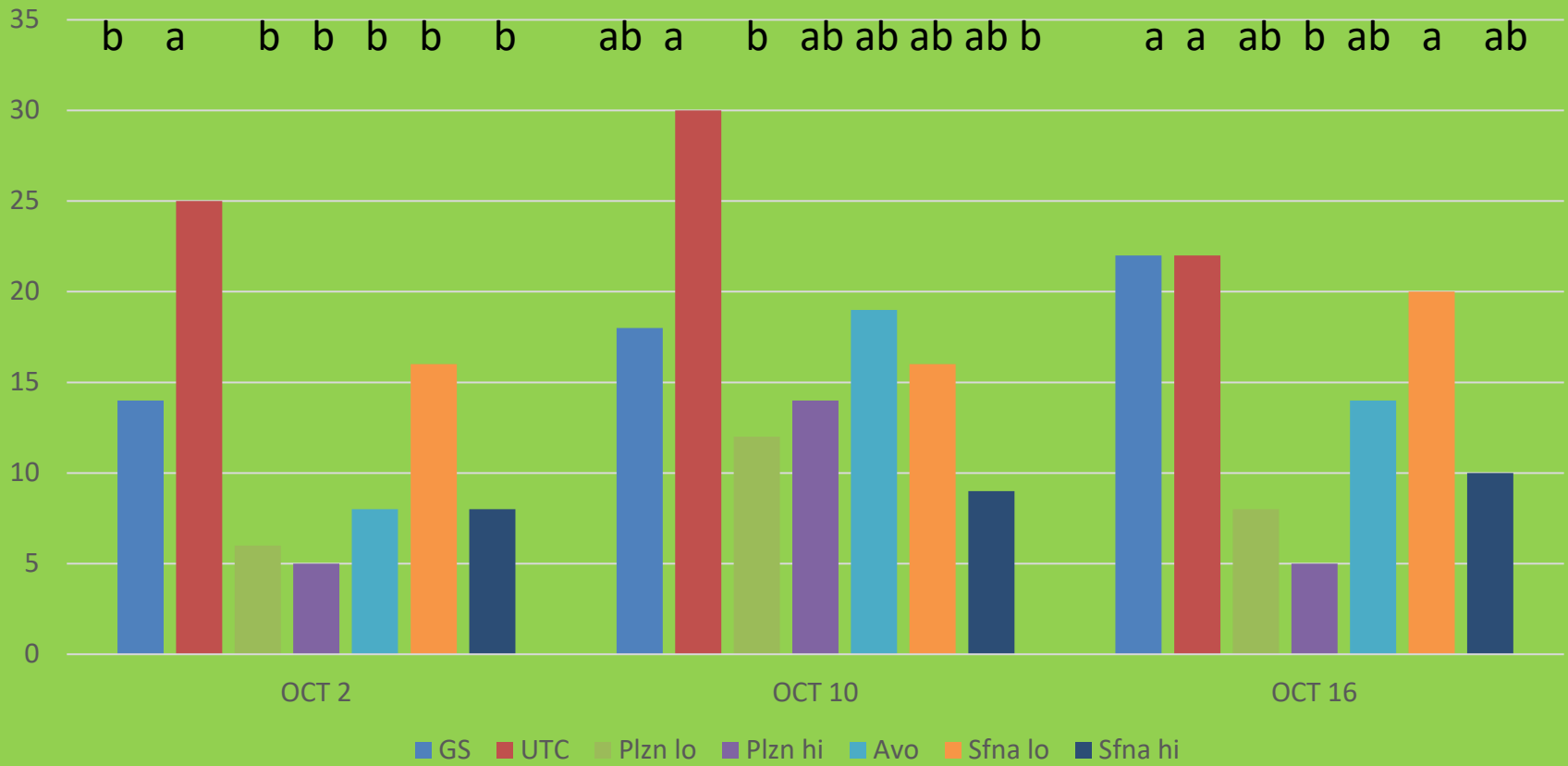
September 2023



Twisted fruit



October 2023



Conclusion

- Sefina currently registered
- Avaunt Evo will be available beginning of 2025, watch for meetings
- Plinazolin is in the process of being registered, look for 2026.
- The dominance that lygus has enjoyed in our berries is now in question.